

Abstract

A monoclonal antibody which reacts strongly with uracil and thymine but scarcely with N-carbamyl- β -alanine; a hybridoma producing this monoclonal antibody; a method of immunochemically assaying uracil or thymine characterized by using the above-described monoclonal antibody; and diagnostics for DPD deficiency containing the above monoclonal antibody. Because of high sensitivity and specific reaction with uracil and thymine, the above-described monoclonal antibody enables convenient, quick, and selective assaying of uracil and thymine in a sample. The antibody is useful in screening patients with DPD deficient cancer with contraindication to the administration of pyrimidine fluoride-based antitumor agents.